Attorney Docket No.: UMD0067US.NP
Inventors: Welsh et al.
Serial No.: 10/565,417

Filing Date: August 3, 2006

Page 3

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method of imputing missing values in microarray data comprising the steps of:

- (a) clustering the data by a Gaussian mixture clustering (GMC) model;
- (b) estimating missing values by a GMCimpute algorithm so that missing values in microarray data are imputed; and
 - (c) outputting the missing values to a display or memory.
- Claim 2 (previously presented): The method of claim 1, wherein the Gaussian mixture clustering (GMC) model comprises the steps of
- (a) determining a value of K (number of clusters) for microarray data comprising rows and columns;
- (b) partitioning the rows of the microarray data into ${\it K}$ partitions; and
 - (c) repeating a Classification Expectation-Maximization algorithm until the K partitions converge.

Claim 3 (previously presented): A computer-readable medium encoded with a computer program, wherein the computer program, once executed by a computer processor, performs a method of imputing missing values in microarray data according to the method of claim 1.

Attorney Docket No.:

Inventors:

Serial No.:

Filing Date:

Page 4

UMD0067US.NP

Welsh et al.

10/565,417

August 3, 2006

Claim 4 (currently amended): The computer program computer-readable medium of claim 3, wherein the Gaussian mixture clustering (GMC) model comprises the steps of

- (a) determining a value of K (number of clusters) for microarray data comprising rows and columns;
- (b) partitioning the rows of the microarray data into $\it K$ partitions; and
- (c) repeating a Classification Expectation-Maximization algorithm until the K partitions converge.

Claims 5-8 (canceled).